

Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) An element for a consumer product, the element comprising a carrier of a metal or metal alloy and an outer layer, the outer layer [formed by a sol-gel process] and comprising a polymer material with an inorganic main chain, wherein at least a region of said outer layer has a visual appearance different from the visual appearance of surrounding regions of said outer layer, wherein the visual appearance of the surrounding regions of the outer layer is dull-translucent, wherein the at least a region forms a marking which is visible to the human eye.

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2. (previously amended) An element as claimed in claim 1, wherein said at least a region is integral with the surrounding regions of said outer layer.

3. (previously amended) An element as claimed in claim 1, wherein the different visual appearance of said at least one region forming said marking is achieved by laser radiation.

4. (cancelled)

5. (cancelled)

6. (previously amended) An element as claimed in claim 1, the outer layer further comprising at least one filler material.

7. (previously amended) An element as claimed in claim 6, the outer layer further comprising fluorided hydrocarbons.

8. (previously amended) An element as claimed in claim 1, comprising a further layer of polymer material with an inorganic main chain, wherein said further layer surrounds the at least one region which forms said marking in said outer layer.

9. (previously amended) An element as claimed in claim 1, wherein said inorganic main chain has organic lateral branches.

10. (previously amended) An element as claimed in claim 9, wherein said organic lateral branches comprise methyl groups.

11. (cancelled)

12. (cancelled)

13. (currently amended) An element as claimed in claim 241, ~~wherein the hard material is selected from metal and metal alloy, and the carrier further comprising an anodized layer~~ which supports said outer layer. (3; 23; 43) *don't see support*

14. (cancelled)

15. (withdrawn) A method of marking an outer layer (3; 23; 43) comprising a polymer material with an inorganic main

chain and having visual properties, which method comprises the provision of changes visible to the human eye in at least one of said visual properties in at least one region (9; 29; 49) of said outer layer (3; 23; 43), whereby said at least one region (9; 29; 49) forms a visible marking (4, 5) in said outer layer (3; 23; 43) when viewed frontally.

16. (withdrawn) A method as claimed in claim 15, wherein the outer layer (3; 23; 43) in which said marking (4, 5) is provided was obtained through the application of a sol-gel substance onto a carrier (2; 22; 42) and through the conversion of said sol-gel substance into said polymer material with an inorganic main chain.

17. (withdrawn) A method as claimed in claim 16, wherein the sol-gel substance comprises an alkoxy silicate as the monomer for the formation of said polymer material.

18. (withdrawn) A method as claimed in any one of the claims 15 to 17, wherein said changes in at least one of said visual properties are obtained through a local energy supply to said at least one region (9; 29; 49) which forms said marking (4, 5).

19. (withdrawn) A method as claimed in claim 18, wherein said local energy supply is provided by a laser beam.

20. (withdrawn) A method as claimed in claim 19, wherein a substantial portion of said laser beam penetrates said outer layer (3) and is absorbed by a carrier which supports said outer layer (3).

21. (withdrawn) A method as claimed in claim 19 or 20, wherein said laser beam is a pulsating laser beam, and wherein the pulsation is carried out with a pulse duration shorter than 30 ns, preferably shorter than 20 ns.

22. (withdrawn) A method as claimed in claim 19 or 20, wherein said laser beam has a wavelength of between 800 and 1600 nm, preferably between 1000 and 1100 nm.

23. (withdrawn) A method as claimed in any one of the claims 19 to 21, wherein the laser has a wavelength at which the outer layer shows a comparatively strong absorption.

24. (cancelled)

main chain and having visual properties, which method comprises the provision of changes visible to the human eye in at least one of said visual properties in at least one region of said outer layer, whereby said at least one region forms a visible marking in said outer layer when viewed frontally.

5 Since the marking is obtained by means of at least one locally changed visual property of the material of the outer layer itself, the marking does not constitute a substantial interruption in the outer layer, and the provision of the marking does not cause any substantial unevennesses in the outer layer.

10 Particular embodiments of the invention have been defined in the dependent claims.

15 Further objects, aspects, effects, advantages, and details of the invention will become apparent in the following description of a few embodiments of the invention, for which reference is made to the drawing, in which

Fig. 1 is a bottom view of a sole of an electric iron,

Fig. 2 is a cross-sectional view on an enlarged scale of a portion of the sole of the electric iron of Fig. 1 which has not been treated for providing a marking,

20 Fig. 3 is a cross-sectional view on an enlarged scale of a portion of the sole of the electric iron of Fig. 1 which has been treated for the provision of a marking,

Fig. 4 is a diagrammatic picture of a marking as partly shown in Fig. 3,

Fig. 5 is a diagrammatic cross-sectional view of a boundary area of a carrier and a layer of polymer material in an alternative embodiment, and

25 Fig. 6 is a diagrammatic cross-sectional view of a boundary area of a carrier and a layer of polymer material in a further alternative embodiment.

An example of an element according to the invention is formed by the sole 1 of an electric iron shown in various ways in Figs. 1 to 4.

30 This sole is built up inter alia from a carrier 2 of metal or a metal alloy which supports an outer layer 3. This outer layer 3 forms a sliding or contact layer 3 of the sole 1. Said outer layer 3 is formed from a polymer material, in this example on the basis of polysilicate which was provided in a sol-gel process. The main chain or backbone of the polymer is inorganic; any lateral chains or branches may be organic, if so desired. The outer

layer 3 is provided with markings in the form of decorative lines 4 and characters 5. The latter may form, for example, a type indication.

The outer layer 3 in which the markings 4, 5 are provided was obtained in that a sol-gel substance was provided on the carrier 2, and the sol-gel substance was subsequently converted into the polymer material with an inorganic main chain of the outer layer 3.

The markings 4, 5 are formed in that visual properties – in this example shade of darkness and color – of regions 9 of the outer layer 3 exhibit a clearly visible difference from the corresponding visual properties of the other regions of the outer layer 3. In this example, the outer layer has a yellow ochre color, whereas the markings are of a darker color and more brownish. Since the markings form part of the outer layer 3, their presence has no substantial negative effect on the sliding properties of the outer layer, the protective effect of the outer layer 3, and the dust-repellent properties of the outer layer 3.

When the markings 4, 5 are provided, changes are applied in the visual properties of the outer layer 3 in those regions of the outer layer 3 which are destined to form the markings 4, 5 in the outer layer when viewed frontally.

Compared with the separate provision of portions of the outer layer 3 with deviating visual properties in the areas of the markings, the above offers the advantage that the provision of the outer layer 3 can be carried out in one step or series of steps. It is further achieved thereby that the markings 4, 5 are formed integrally with other portions of the outer layer 3, so that the screening effect of the outer layer 3 over the surface of the sole 1 remains intact also after a long period of use and a corresponding large number of fast and major temperature changes. As is evident from Fig. 3, the outer layer 3 may be locally very thin, or locally interrupted after treatment. Such a minor local defect in the outer layer 3 does not adversely affect the durability of the outer layer 3.

The changes in the visual properties discussed above are obtained in a very efficient manner through the local supply and absorption of energy in those regions which are to form the markings 4, 5. The supply of energy to the outer layer seems to have the effect that bonds between the polymer chains and lateral branches are broken. Ionization of the chains may also play a part. The result is that at least one visual property of the outer layer changes.

If the element, such as the sliding layer in this example, is designed to transfer heat during operation, and especially if also the energy is supplied in the form of heat, it is important that the results of the local energy supply as regards the speed of the temperature change or the level of the temperature achieved surpass the speed of change or the temperature which occur during normal use.

In another embodiment shown in Fig. 6, the outer layer 43 is built up from several (in this example two) layers 50, 51 of an inorganic polymer material. The outer layer 50 has been removed in the region 49 which forms the marking, so that the layer 51 adjoining the carrier 42 is visible. The two layers 50, 51 have clearly differing visual properties, so that a clear marking in the outer layer 43 is obtained in this manner. The removal of the outer layer 50 may again be carried out by means of a laser, but it may also be realized by alternative, for example mechanical means.

In the case of an outer layer composed of two layers having different visual properties, it is also possible to keep the outermost layer at least substantially intact and to change a subjacent layer visually through an action from the outside, for example in that it is made to melt or made to change its color or degree of darkness. This may be achieved, for example, in that the absorption of the radiation is caused to take place selectively in the layer adjoining the carrier and/or in the carrier, and/or in that the layers are so constructed that the layer adjoining the carrier reacts differently to the external action than does the outermost layer.

The outer layer may in principle be self-supporting or may be provided on a different type of carrier, for example made of glass or ceramic material. Furthermore, the outer layer may be a shaver head or a control panel, or it may serve as an easily cleanable protective layer, for example of a hot plate of a coffee maker, instead of as a sliding layer of, for example, an ironing sole.

In view of the above it will be clear to those skilled in the art that many alternative embodiments may exist and be created in addition to those described above.